

VMware Aria Automation: Orchestration and Extensibility

Course Overview

During this five-day course, you focus on using VMware Aria Automation Orchestrator™ to extend the functionality of VMware Aria Automation™. You learn how to provide XaaS (Anything as a Service) and implement machine lifecycle extensibility using the VMware Aria Automation Event Broker. You also learn how to create VMware Aria Automation Orchestrator workflows and VMware Aria Automation ABX actions. You learn about various features, including basic scripting implementation along with logic processing to implement a variety of functions to use in your environment. This course teaches implementing debugging, loops, conditions, and user interactions in VMware Aria Automation Orchestrator.

The course introduces the VMware Aria Automation Orchestrator HTML 5 interface, with API calls and REST functions, to give you the groundwork to implement a variety of plug-ins and scripts. This course is designed to give you the tools to craft custom solutions in the product.

Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Describe the features, benefits, components, and integration of VMware Aria Automation Orchestrator and VMware Aria Automation
- Describe the role of VMware Aria Automation Orchestrator workflows and content elements in automation
- Use the VMware Aria Automation Orchestrator client to access and navigate the VMware Aria Automation Orchestrator platform, and to import and run VMware Aria Automation Orchestrator library workflows
- Design, develop, and run custom reusable VMware Aria Automation Orchestrator workflows
- Use VMware APIs in the VMware Aria Automation Orchestrator workflow
- Integrate VMware Aria Automation with VMware Aria Automation Orchestrator instances to extend infrastructure as a service (IaaS) system life-cycle processes and to enhance and deliver custom IT services
- Use anything as a service (XaaS) to extend VMware Aria Automation to other enterprise systems
- Use the VMware Aria Automation Event Broker service to trigger specific VMware Aria Automation Orchestrator workflows

Target Audience

- Experienced VMware administrators, automation and orchestration specialists, system integrators, private cloud administrators, and public cloud administrators

Prerequisites

Before taking this course, you should have completed the following course:

- [VMware Aria Automation: Install, Configure, Manage \[V8.10\]](#) course or equivalent knowledge

You should also have the following understanding or knowledge:

- Knowledge of VMware vSphere®
- Working knowledge of scripting or programming using JavaScript, Windows PowerShell, Perl, Java, Python, or similar languages. All code is provided during class.

Course Delivery Options

- Classroom
- Live Online
- [Private training](#)

Product Alignment

- VMware vSphere 8.0
- VMware Aria Automation 8.13
- VMware Aria Automation Orchestrator 8.13
- VMware Aria Suite Lifecycle™ 8.12

Course Modules

1 Course Introduction

- Introduction and course logistics
- Course objectives

2 Overview of VMware Aria Automation and VMware Aria Automation Orchestrator

- Define the purpose of VMware Aria Automation
- Outline the purpose of VMware Aria Automation Orchestrator
- Describe the main components of VMware Aria Automation
- Describe the main components of VMware Aria Automation Orchestrator

3 Using Schema Elements

- Describe a scriptable task
- Run a Polyglot script from a VMware Aria Automation Orchestrator workflow
- Invoke JavaScript from a VMware Aria Automation Orchestrator workflow
- Invoke a VMware Aria Automation Orchestrator workflow from a VMware Aria Automation Orchestrator workflow
- Invoke an action from a VMware Aria Automation Orchestrator workflow
- Use VMware Aria Automation Orchestrator workflows synchronously and asynchronously

4 Working with Variables

- Define inputs, outputs, and variables in VMware Aria Automation Orchestrator workflows
- Bind variables in VMware Aria Automation Orchestrator workflows
- Explain the purpose of binding in VMware Aria Automation Orchestrator workflows
- Use Wrapping in VMware Aria Automation Orchestrator workflows
- Use APIs and the API Explorer
- Create actions in VMware Aria Automation Orchestrator
- Use VMware Aria Automation Orchestrator input forms

- Manage user interactions in VMware Aria Automation Orchestrator

5 Handling Exceptions, Logging, and Debugging

- Identify the function of exception handling
- Handle exceptions in VMware Aria Automation Orchestrator workflows
- Use logs in VMware Aria Automation Orchestrator workflows
- Debug VMware Aria Automation Orchestrator workflows
- Monitor variable values

6 Branching and Looping

- Use decision schema element for branching in VMware Aria Automation Orchestrator workflows
- Use switch schema element for branching in VMware Aria Automation Orchestrator workflows
- Use loops in VMware Aria Automation Orchestrator workflows

7 Working with Assets

- Create and use configuration elements in VMware Aria Automation Orchestrator
- Use resource elements in VMware Aria Automation Orchestrator
- Create and use packages in VMware Aria Automation Orchestrator

8 Working with Plug-Ins

- Explain the functionality of VMware Aria Automation Orchestrator plug-ins
- Download and install plug-ins
- Use the SSH plug-in in VMware Aria Automation Orchestrator
- Use the REST plug-in in VMware Aria Automation Orchestrator
- Use the VMware Aria Automation plug-in in VMware Aria Automation Orchestrator
- Use the PowerShell plug-in in VMware Aria Automation Orchestrator
- Use dynamic types in VMware Aria Automation Orchestrator



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com

© 2024 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO BY CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.

9 Working with Versioning and Git

- Manage versioning in VMware Aria Automation Orchestrator
- Use Git in VMware Aria Automation Orchestrator

10 Working with Time-Related Schema Elements

- Use scheduling in VMware Aria Automation Orchestrator
- Use sleeping in VMware Aria Automation Orchestrator
- Use waiting in VMware Aria Automation Orchestrator

11 Introduction to Extensibility

- Introduction to VMware Aria Automation extensibility
- Explain Event Broker Service
- Explain life cycle integration

12 Using the Event Broker

- Explain the functionality of the Event Broker Service
- Overview of VMware Aria Automation Event Broker
- Create VMware Aria Automation subscriptions
- Data exchange between VMware Aria Automation and VMware Aria Automation Orchestrator

13 Using ABX Actions

- Overview of Action Based Extensibility (ABX)
- Describe Function as a Service (FaaS)
- Differentiate between VMware Aria Automation Orchestrator and ABX
- Create an ABX action that is called by a VMware Aria Automation subscription

14 Working with Services, Resource Actions, and Custom Resources

- Describe the service broker service
- Use VMware Aria Automation Orchestrator as a content source in VMware Aria Automation
- Create resource actions in VMware Aria Automation
- Create custom resources in VMware Aria Automation

15 Capturing the vSphere Client Code

- Use the vSphere Client code capture to capture code in VMware Aria Automation Orchestrator workflow, JavaScript, PowerCLI or other languages
- Use the captured code in VMware Aria Automation Orchestrator workflows or actions

Contact

If you have questions or need help registering for this course, click [here](#).



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com

© 2024 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.